

## ABSTRACT OF THE DISCLOSURE

Disclosed are novel methods of using elongation factor p (efp) and related constituents of ribosomal complexes which comprise efp, the 50S ribosomal subunit, the 30S ribosomal subunit, the 70S initiation complex, and related proteins, cofactors and enzymes.

- 5 Methods of identifying compounds which modulate prokaryotic elongation factor p and modify cell function are described. Both *in vitro* and *in vivo* methods for identifying compounds which modulate such constituents and affect cell function are described. Such identified compounds, including various antibiotics, which specifically affect cell growth, methods of treating various disorders with such compounds, and antiseptics containing such  
10 compounds are described. The present invention is also directed to methods and compounds that modulate prokaryotic elongation factor p.